



# INDOOR RUNWAYS

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## Lighter than air in the gym

**W**ho has not marveled at the eerie buoyancy of a child's balloon as it floats along on the end of its string? Such toys seem the ultimate expression of free flight, especially when the string escapes the grasp of those little fingers. Now substitute the string for an invisible tether that gives you full motion freedom and you will really have something.

The RC Guys blimp kit can be built in an evening or two and is large enough to make an impression wherever it is flown. It is patterned after the typical advertising blimps seen wearing the colors of such companies as Fuji Film, Met Life, Outback Steakhouse, and of course, Goodyear. The large polyurethane envelope is relatively impermeable to helium, so a single fill will last for quite a while with only minor topping off.

### AIRBORNE

Forwards, backwards, up, down, left or right; flying a blimp is a unique experience that even with a lot of anticipation, will be different than what you expect. Fortunately, this is one flying machine that lets you stop and think, with almost no risk to anyone, or anything, nearby. Anyone who has held a transmitter before can easily learn to control this blimp.

You will quickly find that the best approach to flying a blimp is to apply an input, then remove it as you wait for a reaction. Holding power for a prolonged period can generate a lot of inertia, requiring the same duration of an opposite control to stop the motion. Continuous power also saps your battery reserves, so your duration will drop as you maneuver more aggressively. Once you get the hang of it, this blimp is very maneuverable.



Still shy of his fourth birthday, Gryffin had little trouble keeping up with verbal guidance while flying the blimp.

### SPECS

**PLANE:** Commercial Blimp

**MANUFACTURER:** RC Guys

**DISTRIBUTOR:** RC Guys

**TYPE:** Electric indoor commercial blimp ARF

**FOR:** Beginner to intermediate pilots

**VOLUME:** 15 cu. ft.

**FLYING WEIGHT:** Just a smidge more than nothing

**LENGTH:** 66 in.

**RADIO:** 3 channels required; flown with a Spektrum DX6 transmitter, Spektrum AR6000 receiver, (1) Spektrum S-75 micro servo

**POWER SYSTEM:** 3 N-20 motors, 3.125-inch U-80 props, RC Guys LTA-5-speed control (included in kit), 4-cell 270mAh NiCd battery

**FULL THROTTLE POWER:** 2.02 amps, 9.1 watts; 4.55 W/oz., 72.7 W/lb.

**TOP RPM:** 9,380

**DURATION:** 40 minutes mixed flying

**MINIMAL FLYING AREA:** Any indoor space

**PRICE:** \$329.95

**COMPONENTS NEEDED TO COMPLETE:** 3-channel radio with (1) micro servo, 270-350mAh 4.8V NiCd battery

### SUMMARY

Lighter-than-air flyers have long captured our imagination as they float through the sky like the toy balloons of our childhood and the puffy clouds of a warm summer's day. While of limited practicality beyond an aerial billboard, blimps are just plain fun, and always inspire a smile. Here is the chance to have a little fun or even do a little advertising at your local high school basketball games.

Since all other flying models make some amount of noise, and move quite quickly, it is fun to fly the blimp slowly, trying to maintain precise control while ghosting around the flying site. You can also set up skill tasks, such as a slalom course with tethered balloons.

**TIPS FOR SUCCESS**

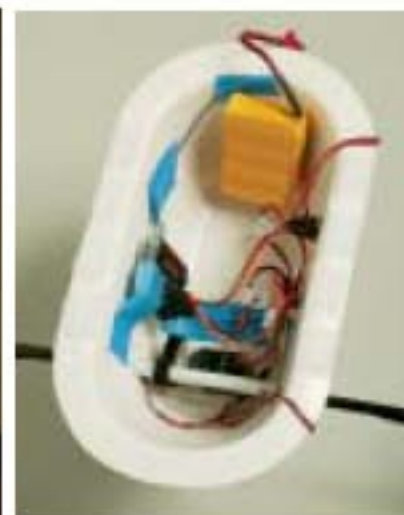
The number one recommendation is to never fly this blimp outside. It does not have the power to overcome a slight breeze. Indoors however, it is great fun.

The trickiest part of the assembly process is holding the envelope steady when measuring and applying the fin holders and velcro for the gondola. I inflated the blimp with air using my vacuum cleaner, then trapped it between two chair backs to stabilize

cubic feet, and extended flying opportunities will require topping off as needed, typically once a day. A 50-balloon tank can be rented for \$20-25, and will easily provide the initial inflation and several top offs; just the ticket for a trade show or weekend basketball tournament.

Tie a tether line to the nose or tail, and anchor that to something heavy on the ground. I also attach the gondola before inflation, because it provides stability by holding the envelope upright as you fill it.

Once inflated you will have to establish a slight negative buoyancy by ballasting with coins or other small weights. Our blimp sits a little tail low when set up as described in the manual, so I usually attach some of the ballast above the nose to the dump valve with a little tape. A coin or two will make a big dif-



The vacuum formed gondola houses the receiver, custom speed control, flight battery and a servo used to angle the main motors up or down. The compact Spektrum receiver works very well tucked into the gondola.

it. Apply short lengths of masking tape to accept locating reference marks so you don't have to mark up the material. You will also want to follow the directions and clean the envelope with denatured alcohol when mounting the fin holders or applying velcro for the gondola.

You will need to carefully open up two holes in the gondola sides for the motor cross tube. These locations are marked on the gondola sides, but be careful to ensure that the boom passes through the sides with proper alignment. You don't want the arm to be sagging, or angled off to one side. I made a jig of Lego blocks to ensure alignment.

The pop rivets are a nice touch for attaching the switch harness to the gondola wall, but if you don't have a rivet puller, don't despair. I used a pair of socket head cap screws to hold the switch in place.

Let's face it, not many of us have the room to store, or the ability to transport, the blimp when inflated. Deflation and disassembly require adding connectors to the tail motor extension cable. I also added a connector set at the forward end of the lead, so that I can install the lower fin and gondola without having to thread the lead through its guide tube for every outing.

You will also need helium for inflation. Fortunately, helium is readily available, and almost every community has a florist or party store that can advise you. Initial inflation requires about 15

ference as you fine-tune your trim. Remember, you want the blimp to slowly sink with power off, so that you do not lose it to the ceiling if the battery dies unexpectedly.

Set up your throttle on the elevator channel. The throttle is used sparingly, and you want to be able to easily find the center off position. The centering spring is a wonderful aid that helps maintain control, and conserves battery life. The motor elevation control works well on the traditional throttle stick, as you will often want to set a thrust line and have it hold steady without worrying about the spring return.

**CONCLUSION**

From Alberto Santos Dumont's first controlled flight around the Eiffel Tower in 1901, to present day advertising blimps seen on television, lighter than air flight has always seemed magical. Here is a chance to experience that mystical thrill with radio control, and put an interesting new twist on your indoor flying sessions. ☺

**Links**

RC Guys, [www.rcguys.com](http://www.rcguys.com), (519) 756-1110

Spektrum, distributed by Horizon Hobby, [www.spektrumrc.com](http://www.spektrumrc.com), (800) 338-4639

For more information, please see our source guide on pg. 209.